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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/625,587	07/22/2003	Scott Dickson	990467	7742

23696 7590 06/23/2006

QUALCOMM, INC
5775 MOREHOUSE DR.
SAN DIEGO, CA 92121

EXAMINER

SOBUTKA, PHILIP

ART UNIT	PAPER NUMBER
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2618

DATE MAILED: 06/23/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/625,587

Applicant(s)

DICKSON, SCOTT

Examiner

Philip J. Sobutka

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☐ Responsive to communication(s) filed on ____.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-38 is/are pending in the application.
4a) Of the above claim(s) ____ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 14-35 is/are allowed.
- 6) ☒ Claim(s) 1,2,12,13 and 36-38 is/are rejected.
- 7) ☒ Claim(s) 3-11 is/are objected to.
- 8) ☐ Claim(s) ____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on ____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. ____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date 6/10/04.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. ____.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: ____.

DETAILED ACTION

Claim Rejections - 35 USC § 101

1. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

2. Claims 37 and 38 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter.

Claims 37 and 38 are not limited to tangible embodiments. In view of Applicant's disclosure, specification paragraph 88, the medium is not limited to tangible embodiments, instead being defined as including both tangible embodiments (e.g., volatile and non-volatile media such as optical or magnetic disks) and intangible embodiments (e.g., transmission media such as acoustic, optical or electromagnetic waves) (i.e., downloaded through the I/O device). As such, the claim is not limited to statutory subject matter and is therefore non-statutory. (See 1300 OG 142: Interim guidelines for Examination of Patent Applications for Patent Subject Matter Eligibility; Annex IV (c), published 22 November 2005).

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

4. Claims 1,2,12,13,36 are rejected under 35 U.S.C. 102(e) as being anticipated by Baker et al (US 6,556,838).

Consider claim 1. Baker teaches a method comprising:

keeping a running history, up to a predetermined length, of power control instructions included in a first plurality frames received in one direction on a link of a channel, the first frames being queued before processing (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*); and

generating power control commands for a second plurality of frames to be transmitted on a return direction of the channel, based at least in part on the running history being kept, in a manner that effectuates a slowing of response to the incoming power control instructions, the second frames also being batched for subsequent processing in batch form for transmission (*note that the adjusted step size of Baker would result in a slowing of response under the appropriate conditions see figure 2, column 4, lines 38-67, column 5, lines 35 – column 6, line 65*).

As to claim 2, note the Baker teaches the power control equals two bits (*Baker see column 3, line 63*).

As to claim 12, note that Baker teaches the operations being performed in a gateway of a wireless communication system (*Baker teaches that one station could be a base station, or gateway, see column 1, lines 65 – column 2, line 11*).

As to claim 13, note that Baker teaches the operations are being performed in an emulated gateway and a gateway simulator of a wireless communication test system (*Note that Baker's arrangement is an emulator see column 2, lines 47-57*).

Consider claim 36. Baker teaches an apparatus comprising: means for keeping a running history, up to a predetermined length, of power control instructions included in a first plurality frames received on a first link of a channel, the first frames being grouped before their processing (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*); and means for generating power control commands for a second plurality of frames to be transmitted on a second link of the channel, based at least in part on the running history being kept, in a manner that effectuate slowing response to the incoming power control instructions, the second frames also being grouped for subsequent processing in batch for transmission (*note that the adjusted step size of Baker would result in a slowing of response under the appropriate conditions see figure 2, column 4, lines 38-67, column 5, lines 35 – column 6, line 65*).

Claim Rejections - 35 USC § 103

5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the

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invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

6. Claims 37 and 38 are rejected under 35 U.S.C. 103(a) as being unpatentable over Baker et al (US 6,556,838).

Consider claim 37. Baker teaches a method comprising: keeping a running history, up to a predetermined length, of power control instructions included in a first plurality frames received on a first link of a channel, the first frames being grouped before their processing (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*); and generating power control commands for a second plurality of frames to be transmitted on a second link of the channel, based at least in part on the running history being kept, in a manner that effectuate slowing response to the incoming power control instructions, the second frames also being grouped for subsequent processing in batch for transmission (*note that the adjusted step size of Baker would result in a slowing of response under the appropriate conditions see figure 2, column 4, lines 38-67, column 5, lines 35 – column 6, line 65*).

Baker lacks a teaching of the method being stored on machine-readable media as executable instructions. Official Notice is taken that it is notoriously well know in the art to store methods as executable instructions on machine-readable media. Therefore it would have been obvious to one of ordinary skill in the art to modify Baker to store the method as instruction on machine-readable media in order to allow the method to be easily transferred to a new machine.

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Consider claim 38. Baker teaches a method comprising: emulating a gateway including receipt of a first plurality frames on a first link of a channel, and grouping said first frames for processing in batch form, each of said first frames including a power control instruction, and outputting the power control instruction includes in each of said first frames (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*); a gateway simulator coupled to the gateway emulator (*Baker teaches that one station could be a base station, or gateway, see column 1, lines 65 – column 2, line 11. Note that Baker's arrangement is an emulator see column 2, lines 47-57*) to process the batched first frames in batch and to receive the power control instructions of the first frames outputted by the gateway emulator, and to generate a second plurality of frames for a second link of the channel, the second plurality of frames also being batched before being handled by the gateway emulator in batch, wherein the gateway simulator keeps a running history, up to a predetermined length, of the power control instructions included in the first frames, and generate power control commands for the second frames based at least in part on the running history being kept, in a manner that effectuates slowing of responding to the incoming power control instructions (*Baker see column 2, lines 46-67, note that Baker teaches combining power control slots, or frames see especially column 4, lines 30-67*).

Baker lacks a teaching of the method being stored on machine-readable media as executable instructions. Official Notice is taken that it is notoriously well know in the art to store methods as executable instructions on machine-readable media. Therefore

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it would have been obvious to one of ordinary skill in the art to modify Baker to store the method as instruction on machine-readable media in order to allow the method to be easily transferred to a new machine.

Allowable Subject Matter

7. Claims 14-35 are allowed.

8. Claims 3-11, 14-35 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Consider claim 3, the nearest prior art as shown in Baker fails to teach the method of claim 2, wherein said generating comprises generating m "zero" value power control bits and n "one" value power control bits for each batch formed with a subset of the second frames, with m and n differing by at most 1, if the two-bit running history equals a selected one of "01" and "10", m and n being integers.

Consider claim 8, the nearest prior art as shown in Baker fails to teach the method of claim 2, wherein said generating comprises alternating between generating "one" value power control bit and "zero" value power control bit for each batch formed with a subset of the second frames, with a selected one of the last frame and the last two frames receiving a "one" value power control bit, if the two bits running history equal "11".

Consider claim 9, the nearest prior art as shown in Baker fails to teach the method of claim 8, wherein the last frame receives a "one" value power control bit, if there are odd number of frames in each batch, and the last two frames receive a "one" value power control bit, if there are even number of frames in each batch.

Consider claim 10, the nearest prior art as shown in Baker fails to teach the method of claim 2, wherein said generating comprises alternating between generating "zero" value power control bit and "one" value power control bit for each batch formed with a subset of the second frames, with a selected one of the last frame and the last two frames receiving a "zero" value power control bit, if the two bits running history equal "00".

Consider claim 14, the nearest prior art as shown in Baker fails to teach a gateway of a wireless communication system, comprising: a transceiver to receive a first plurality frames on a first link of a channel, and batch said first frames for processing in batch, each of said first frames include a power control instruction, and the transceiver outputting the power control instruction included in each of said first frames; a processing subsystem coupled to the transceiver subsystem to process the batched first frames in batch and to receive the power control instructions of the first frames outputted by the transceiver subsystem, and to generate a second plurality of frames for a second link of the channel, the second plurality of frames also being batched before being handled by the transceiver subsystem in batch, wherein the

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processing subsystem: keeps a running history, up to a predetermined length, of the power control instructions included in the first frames, and generate power control commands for the second frames based at least in part on the running history being kept, in a manner that effectuates slowing of responding to the incoming power control instructions.

Consider claim 25, the nearest prior art as shown in Baker fails to teach a wireless communication testing system, comprising: a gateway emulator to emulate a gateway including receipt of a first plurality frames in one direction on a link of a channel, and queueing said first frames for processing in batch, each of said first frames including a power control instruction, and the gateway emulator outputting the power control instruction included in each of said first frames; a gateway simulator coupled to the gateway emulator to process the grouped first frames in batch and to receive the power control instructions of the first frames output by the gateway emulator, and to generate a second plurality of frames for transfer in an opposite direction on a link of the channel, the second plurality of frames also being batched before being handled by the gateway emulator in batch, wherein the gateway simulator: maintains a running history over a predetermined length, of the power control instructions included with the first frames, and generates power control commands for the second frames based at least in part on the running history being kept, in a manner that effectuates a slowing of response to the incoming power control instructions.

Conclusion

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Philip J Sobutka whose telephone number is 571-272-7887. The examiner can normally be reached Monday through Friday from 8:30 - 5:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Matthew D. Anderson can be reached on 571-272-4711.

10. The central fax phone number for the Office is 571-273-8300.


Most facsimile-transmitted patent application related correspondence is required to be sent to the Central FAX Number.

CENTRALIZED DELIVERY POLICY: For patent related correspondence, hand carry deliveries must be made to the Customer Service Window (now located at the Randolph Building, 401 Dulany Street, Alexandria, VA 22314), and facsimile transmissions must be sent to the Central FAX number, unless an exception applies. For example, if the examiner has rejected claims in a regular U.S. patent application, and the reply to the examiner's Office action is desired to be transmitted by facsimile rather than mailed, the reply must be sent to the Central FAX Number.

11. Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

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Philip J Sobutka

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PATENT EXAMINER

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